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a belt forming a closed loop, which belt is mounted on said first roller and said at least one additional roller;
at least one chemical mechanical planarization polishing pad mounted to said belt;
and
a drive system coupled to at least said first roller to rotate said first roller and to cause said belt and said chemical mechanical planarization polishing pad to move in a path;
wherein said belt comprises a high-strength material.

REMARKS

I. Office Action Summary

Claims 23-32, 34, and 36-43 are presently pending. Claims 23, 30, 32, 34, 36-38, and 40 are the independent claims. In the Office Action, the Examiner provided an election/restriction requirement. The Examiner also withdrew an earlier indication of allowance for claims 33 and 35. The Examiner rejected claims 32, 34, 36-38, and 40 as indefinite for reciting the phrase “for polishing a semiconductor wafer” in the preamble. Claims 32, 34, and 36-43 were rejected as obvious over the combination of two newly cited references – Sampietro and McGarvey.

II. Election/Restriction Requirement

In order to expedite prosecution of this application, Applicants have canceled claims 23-31 pursuant to the Examiners election/restriction requirement. Applicants reserve the right to file these claims in a continuation application.

III. Rejection of Claims 32, 34, 36-40 Under 35 USC §112, Second Paragraph

Applicants have amended claims 32, 34, 36-40 to clarify that the polishing pad is a chemical mechanical planarization (CMP) polishing pad for use on semiconductor wafers. As known to those of skill in the art, a CMP polishing pad is necessary to produce the extremely fine planarization required for semiconductor wafers. With this amendment, Applicants submit that the invention is more clearly defined and that the §112 rejection has been traversed.

III. Claim Rejections Under 35 USC §103(a)

The Examiner rejected claims 32, 34, and 36-43 as obvious over Sampietro (U.S. Patent No. 5,383,309) in view of McGarvey (U.S. Patent No. 3,427,765). Both of these references refer to generic sanding devices and neither disclose a polishing pad assembly having at least one CMP polishing pad for polishing semiconductor wafers as claimed in amended claims 32, 36-38 and 40.

Chemical mechanical planarization is a specific process that imposes extreme demands of accuracy and is used in semiconductor processing to planarize semiconductor wafers to within tolerances measured in angstroms (10^{-10} meters). As described in the specification on, for example, page 4, line 22 to page 5, line 5, the chemical mechanical planarization process used to planarize semiconductor wafers requires use of a polishing pad suitable for use with a polishing slurry or agent. The claimed polishing pad assembly, as amended, recites the element of a chemical mechanical planarization polishing pad that is missing from the cited references. There is no teaching or suggestion in either Sampietro or McGarvey of chemical mechanical planarization and one of ordinary skill in the art would not look to Sampietro or McGarvey to address CMP issues. Accordingly, Applicants respectfully submit that amended claims 32, 34, 36-38 and 40

distinguish over the cited references. Claims 39 and 41-43 are dependent claims, therefore their allowability directly follows from allowability of independent claims 32, 34, 38, and 40.

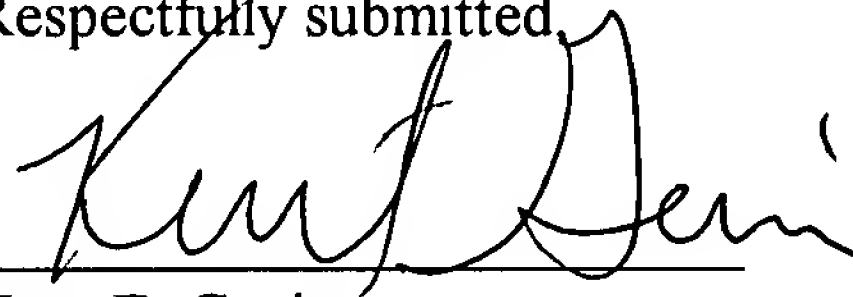
Applicants submit that all of the claims are now in condition for allowance.

IV. Conclusion

Applicants have amended claims 32, 34, 36-38, and 40 to more clearly define the claimed invention. Applicants submit that the above amendments are fully supported by the specification as filed. In light of the above amendments and remarks, Applicants submit that the pending claims distinguish over the cited references and are in condition for allowance.

If any questions arise or issues remain, the Examiner is invited to contact the undersigned at the number listed below in order to expedite disposition of this application.

Respectfully submitted,



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